AMENDED IN ASSEMBLY MAY 12, 2014 AMENDED IN ASSEMBLY APRIL 21, 2014 AMENDED IN ASSEMBLY MARCH 28, 2014

CALIFORNIA LEGISLATURE—2013-14 REGULAR SESSION

ASSEMBLY BILL

No. 2529

Introduced by Assembly Member Williams

February 21, 2014

An act to add Section 25327 to the Public Resources Code, relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 2529, as amended, Williams. Energy: usage: plug-in equipment. Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission), on a biennial basis, to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery, and distribution. Existing law requires the Energy Commission, beginning November 1, 2003, and biennially thereafter, to adopt an integrated energy policy report containing an overview of major energy trends and issues facing the

Under existing law, the Public Utilities Commission has regulatory jurisdiction over the public utilities, including electrical corporations.

This bill would require the Energy Commission and the Public Utilities Commission, working jointly, to perform a baseline study, by January 1,2016, 2017, of energy usage by plug-in equipment, as defined, during the year 2014, and to develop a coordinated implementation plan to achieve by 2030 specified aggregate reductions in energy consumption by plug-in equipment from the 2014 baseline, with biennial

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intermediate targets. The bill would authorize the Energy Commission and the Public Utilities Commission to increase or decrease the aggregate reduction targets in energy consumption, if the Energy Commission and the Public Utilities Commission jointly determine, based on the baseline study, that those aggregate reduction targets are either unattainable or uneconomic for ratepayers, or are too conservative and would require a notice to be submitted to the Legislature, if those targets are increased or decreased due to unforseen developments in plug-in equipment technology or the market for plug-in equipment. The bill would require the Energy Commission to report on the progress-towards toward meeting the reduction targets and update the implementation plan as a part of the integrated energy policy report.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

The people of the State of California do enact as follows:

SECTION 1. (a) The Legislature finds and declares all of the following:

- 3 (1) Energy efficiency programs and standards are essential tools to help California conserve energy.
 - (2) Currently, the various types of plug-in equipment, such as indoor and outdoor appliances, consumer and office electronics, and power tools, are responsible for over 50 percent of residential electricity consumption and 16 percent of commercial electricity consumption in California and this electricity consumption is projected to increase by 2030.
 - (3) California has set ambitious goals for energy efficiency in buildings and lighting, but does not have quantified goals for a category that represents the majority of residential electricity consumption.
 - (4) Large and cost-effective energy savings opportunities remain available in plug-in equipment. There is a need to supplement appliance efficiency standards by expanding existing incentive programs and developing other approaches including partnerships with industry, research and development, and consumer education.
 - (5) Market barriers, such as a lack of consumer awareness and information on product lifetime energy costs, and split incentives between manufacturers who make the key design decisions and consumers who pay the electricity bill give efficiency programs a

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critical role in realizing the economic potential for energy efficiency in plug-in equipment.

- (6) Challenges with the evaluation and the attribution of program savings to utilities and implementers, as well as the focus on short-term savings, are limiting the utilities' ability to achieve market transformation saving opportunities that take longer to implement and require upfront investment to yield large future savings.
- (7) There are insufficient opportunities for the State Energy Resources Conservation and Development Commission and the Public Utilities Commission to integrate key industry expertise into program design and implementation.
- (b) It is the intent of the Legislature to set a goal for plug-in equipment energy consumption to ensure both of the following:
- (1) Energy savings opportunities in support of the state's energy and climate change goals are captured.
- (2) The effective utilization of incentive programs, partnerships with industry, research and development, consumer education, and efficiency standards to meet the state's energy and climate goals.
- SEC. 2. Section 25327 is added to the Public Resources Code, to read:
- 25327. (a) (1) For the purposes of this section, except as provided in paragraph (2), "plug-in equipment" means an electrical device that plugs into a wall outlet, including, but not limited to, indoor appliances, such as kitchen and laundry appliances, portable, window-mounted, or through-the-wall HVAC equipment, commercial plug-in refrigeration, and security appliances; plug-in outdoor-appliances, such as hot tub and pool pumps; appliances; consumer and office electronics; personal care products; and power tools.
 - (2) "Plug-in equipment" does not include the following:
- (A) Servers at industrial-scale data centers located in buildings whose primary function is to be a data center.
- (B) Heating, Non-plug-in heating, ventilation, and cooling (HVAC) equipment. equipment, including split, packaged, or built up HVAC equipment that is typically installed by an HVAC contractor.
- (C) Built-in or portable lighting.
- 39 (D) Infrastructure loads connected directly to the building 40 wiring, such as Ground Fault Circuit Interrupter (GFCI) breakers

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1 and outlets, smoke or carbon monoxide detectors, dimming 2 switches, doorbells, and garage openers. and doorbells.

(E) Electric vehicles.

- (F) Medical devices, as defined in subsection (h) of Section 321 of Title 21 of the United States Code.
 - (3) For purposes of this subdivision, wall outlets include line outlets, such as 110 Voltage Alternating Current (VAC) and other emerging delivery mechanisms, including Universal Serial Bus (USB), Power over Ethernet (PoE), and 24 volt direct current (VDC).
 - (4) For purposes of this subdivision "HVAC" means heating, ventilation, and air conditioning.
 - (b) The commission and the Public Utilities Commission, working jointly, shall do all of the following:
 - (1) On or before January 1, 2016, 2017, perform a baseline study of energy use by plug-in equipment in both the residential and commercial sectors of the state during the year 2014. 2014, in accordance with the following:
 - (A) The study shall identify the average energy consumption of individual product categories that account for 80 percent of total plug-in electricity consumption in the residential sector and in the commercial sector.
 - (B) The study shall include those products that the commission and the Public Utilities Commission elect to include, based on market and technology trends.
 - (C) When conducting the study, priority shall be given to the use of existing recent and relevant studies whenever possible, including those performed in other states, instead of performing new field studies.
 - (2) Develop a coordinated implementation plan, in consultation with stakeholders, to achieve by 2030 at least a 25-percent aggregate reduction in energy consumption per residential household, and a 40-percent aggregate reduction in energy consumption per square foot of commercial space, by plug-in equipment in the state from the 2014 baseline determined pursuant to paragraph (1), with biennial intermediate targets between 2016 2018 to 2030, except as provided in subdivision (c). The coordinated implementation plan shall meet all of the following requirements:

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(A) Be comprised of a complementary portfolio of techniques, applications, and practices that may include, but need not be limited to, incentive programs, rebate programs, appliance early replacement rebate programs that link purchase and disposal rebates, upstream market transformation programs, voluntary initiatives and partnerships with industry to promote innovation, expanded research and development, public outreach and education efforts, and efficiency standards.

- (B) Consider costs and ratepayer protections, consistent with Section 25000.1.
- (C) Use an accurate cost-effectiveness methodology for assessing the long-term value of efficiency savings and ensure that benefits outweigh costs to ratepayers.
- (3) Work with stakeholders to address challenges that may limit or inhibit the achievement of the reduction targets set forth in paragraph (2), including, but not limited to, the evaluation and attribution of energy savings, and the enablement of market transformation programs.
- (4) Track the implementation of the plan in meeting the reduction targets annually through the Electricity Supply Analysis Division of the commission and the Energy Division of the Public Utilities Commission.
- (5) Revise the implementation plan and priorities in consultation with stakeholders.
- (c) (1) The commission and the Public Utilities Commission may increase or decrease the aggregate reduction targets for energy consumption specified in paragraph (2) of subdivision (b), if the commission and the Public Utilities Commission jointly determine, based on the baseline energy use study conducted pursuant to paragraph (1) of subdivision (a), that those aggregate reduction targets for energy consumption are either unattainable or uneconomic for ratepayers, or are too conservative.
- (2) If, as a result of unforseen developments in plug-in equipment technology or the market for plug-in equipment, the commission and the Public Utilities Commission take action pursuant to paragraph (1), the commission and the Public Utilities Commission shall submit a notice to the Legislature, in accordance with Section 9795 of the Government Code, describing that action, including the basis for that action.

(c)

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- 1 (d) The commission shall report on the progress towards toward
- meeting the reduction targets through the tracking pursuant to paragraph (4) of subdivision (b) and update the implementation
- plan, as a part of the integrated energy policy report required
- 5 pursuant to Section 25302.